

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1.-13. (Cancelled).

14. (Previously Cancelled).

15.-61. (Cancelled).

62. (Previously Cancelled).

63.-77. (Cancelled).

78. (New) A laser light source comprising:

a semiconductor laser for emitting a fundamental wave;

a single mode fiber for conveying the fundamental wave; and

an optical wavelength conversion element for receiving the fundamental wave from the fiber and generating a harmonic wave, the optical wavelength conversion element having periodic domain inverted structures,

wherein the optical wavelength conversion element has a modulation function.

79. (New) A laser light source according to claim 78, wherein the optical wavelength conversion element is formed in an $\text{LiNb}_x\text{Ta}_{1-x}\text{O}_3$ ($0 \leq X \leq 1$) substrate.

80. (New) A laser light source, comprising:

a semiconductor laser for emitting a pumped light;

a fiber for conveying the pumped light;

a solid state laser crystal for receiving the pumped light from the fiber and generating a fundamental wave; and

an optical wavelength conversion element for receiving the fundamental wave and generating a harmonic wave, the optical wavelength conversion element having periodic domain inverted structures.

81. (New) A laser light source according to claim 80, wherein the optical wavelength conversion element has a modulation function.

82. (New) A laser light source according to claim 80, wherein the optical wavelength conversion element is formed in an $\text{LiNb}_x\text{Ta}_{1-x}\text{O}_3$ ($0 \leq X \leq 1$) substrate.

83. (New) A laser light source according to claim 80, wherein the solid state laser crystal and the optical wavelength conversion element are integrated together.

84. (New) A laser light source, comprising:

a semiconductor laser for emitting a pumped light;

a solid state laser crystal for receiving the pumped light and generating a fundamental wave;

a single mode fiber for conveying the fundamental wave; and

an optical wavelength conversion element for receiving the fundamental wave from the fiber and generating a harmonic wave, the optical wavelength conversion element having periodic domain inverted structures.

85. (New) A laser light source according to claim 84, wherein the optical wavelength conversion element has a modulation function.

86. (New) An optical disk apparatus, comprising:

an optical pickup incorporating therein the optical wavelength conversion element for converting a fundamental wave to a harmonic wave;

a laser light source, provided separately from the optical pickup, for generating laser light; and

an actuator for moving the optical pickup,

wherein the laser light radiated from the laser light source is incident upon the optical pickup via an optical fiber.

87. (New) An optical disk apparatus according to claim 86, wherein the laser light source includes a semiconductor laser disposed outside the optical pickup.

88. (New) An optical disk apparatus according to claim 87, wherein the laser light source further comprises a solid state laser crystal for generating a fundamental wave using laser light emitted from the semiconductor laser as pumped light.

89. (New) An optical disk apparatus according to claim 88, wherein:

the solid state laser crystal is disposed outside the optical pickup; and the fundamental wave generated by the solid state laser medium is incident upon the optical wavelength conversion element via the optical fiber.

90. (New) An optical disk apparatus according to claim 88, wherein:

the solid state laser crystal is disposed inside the optical pickup; and the laser light emitted from the semiconductor laser is incident upon the solid state laser via the optical fiber.